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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,329	11/04/2003	Raghunath Padiyath	59346US002	4935

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EXAMINER	
HOANG, QUOC DINH	
ART UNIT	**PAPER NUMBER**
2818	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/701,329	PADIYATH ET AL.	
	Examiner	Art Unit	
	Quoc D. Hoang	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicants' amendment filed on 06/09//2005. Claims 1-31 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-18 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prakash (US Pub No. 2005/0017628) in view of Kakinuma et al (U.S. Pat No. 6,579,422) (hereafter "Kakinuma").

Regarding claims 1, 5, 16 and 24, Prakash teaches a method of making an organic light-emitting device comprising: applying a flexible substrate or conductive substrate 10 ([0046]-[0052] and Fig. 1); applying a first electrode layer 12 ([0053] and Fig. 1); applying an insulating layer 22 on a portion of the first electrode layer 12 and on a portion of the substrate 10 ([0056]-[0057] and Fig. 2); applying a light-emitting layer 30 ([0058] and Fig. 3); and applying a second electrode layer 522 electrically isolated from the first electrode layer 12 ([0068] and Fig. 5).

Regarding claim 1, Prakash do not teaches advancing a web comprising a flexible substrate or conductive substrate in a direction, wherein at least one electrode layer is continuous in the direction of the advancing web substrate.

However, Kakinuma teaches advancing a web comprising a flexible substrate 1 in a direction, wherein at least one electrode layer 8 is continuous in the direction of the advancing web substrate 1 (col. 4, lines 1-35 and Fig. 2). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine a roll-to-roll flexible wed substrate teaching of Kakinuma with Prakash's OLED, because it would have produced a plurality of unit devices at low cost and efficient mass prodution and as taught by Kakinuma, column 1, lines 64-67.

Regarding claims 2 and 3, Prakash teaches first electrode layer 12 is the anode and the second electrode layer is the cathode 522 ([0046]-[00568] and [0115]).

Regarding claim 4, Kakinuma teaches wherein the first electrode layer 4 is continuous in a direction perpendicular to the direction of the advancing web 1 (col. 4, lines 1-35 and Fig. 2).

Regarding claim 7, Prakash teaches removing the insulting layer 22 after applying the first electrode 12 ([0056]-[0057] and Fig. 2);.

Regarding claims 8 and 9, Kakinuma teaches wherein the first electrode layer 4 is applied in a first pattern comprising at least two stripes and the stripes range from being substantially parallel to substantially diagonal to the direction of the advancing web 1 (col. 4, lines 1-35 and Fig. 2).

Regarding claim 10, Kakinuma teaches wherein the first electrode layer 4 is substantially parallel and the second electrode layer 8 is applied in a second pattern comprising at least two stripes a the second pattern is substantially perpendicular to the first pattern (see Fig. 2).

Regarding claims 11-13, Kakinuma teaches wherein the electrode layers 4/8 are applied by means of a method selected from photolithographic patterning (col. 8, lines 3-16).

Regarding claims 14 and 15, Kakinuma teaches wherein the method is a batch process or a continuous process (col. 2, lines 10-15).

Regarding claim 16, Kakinuma teaches wherein the substrate comprises a pair of substantially parallel peripheral edges and the continuous electrode layer extends to the peripheral edges of the substrate (see Fig. 2).

Regarding claims 17, Prakash teaches further comprising providing at least one organic charge transport layer 32 between the light-emitting layer 30 and at least one of the electrode layers 12 [0058].

Regarding claims 18, Prakash teaches wherein the light-emitting layer 30 is selected from the group comprising small molecule emitter, a small molecule doped polymer, a light-emitting polymer, a doped light-emitting polymer, a blended light-emitting polymer, and combinations thereof [0058]-[0065].

Regarding claim 23, Prakash teaches wherein the substrate 10 is transparent [0048].

Regarding claim 25, Kakinuma wherein the second electrode layer 8 is continuous in the direction of the advancing web substrate 1 (col. 4, lines 1-35 and Fig. 2).

4. Claims 19-22 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prakash (US Pub No. 2005/0017628) and Kakinuma et al (U.S. Pat

No. 6,579,422) (hereafter "Kakinuma") as applied to claim 1 above, and further in view of Cok (U.S. Pat No. 6,787,990).

Kakinuma does not teach cutting a portion from the web substrate forming an organic light-emitting device.

However, Cok teaches cutting a portion from the web substrate 20 forming an organic light-emitting device, wherein the continuous electrode layer 24/26 is continuous beyond the dimension of the device prior to cutting (col. 3, line 1-10 and col. 4, lines 9-27). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine cutting the wed substrate 20 teaching of Cok with Kakinuma's OLED, because it would have produced a plurality of unit devices areas as taught by Cok, column 4, lines 9-27. Also, it would have been obvious to one with ordinary skilled in the art to obtain the desired dimension of the organic light-emitting device after cutting as process parameters are optimized because the same materials are used with the same process steps, it appears that the modified Cok would inherently contain the same properties and functions as claimed.

Response to Arguments

5. Applicant's arguments filed 06/09//2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the Kahinuma does not teach electrode layer 8 is continuous in the direction of the advancing web. The examiner disagrees. Clearly in figure. 2(e). Kahinuma teach the electrode layer 8 (or strip pattern 8a) is continuous in the direction of the advancing web 1.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., at least one electrode layer is continuous in the direction of the advancing web) are not recited in the rejected claim 24. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc Hoang whose telephone number is (571) 272-1780. The examiner can normally be reached on Monday-Friday from 8.00 AM to 5.00 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone numbers of the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Quoc Hoang
Patent examiner/AU 2818

David Nelms
Supervisory Patent Examiner
Technology Center 2800